

ETHNO-VETERINARY MEDICINAL EXPERTISE WITH PLANTS UTILIZED FOR THE TREATMENT OF LIVESTOCK ILLNESSES IN PANVEL, URAN TALUKAS OF RAIGAD DISTRICT, MAHARASHTRA

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ABSTRACT

In 2023–2025, a comprehensive field research survey was carried out. This kind of knowledge concerning diseases and the utilization of regional medicinal plants. 73 plant species from 67 genera and 48 families were used in the Raigad district for this study. The list is alphabetized by plant genera, local names, portions of the families that can be used and ethnoveterinary treatments. 47 families including Acoraceae, Annonaceae, Apiaceae, Apocynaceae, Arecaceae, Asclepidaceae, Asteraceae, Bixaceae, Bombacaceae, Brassicaceae, Caesalpinaceae, Capparaceae, Convolvulaceae, Cucurbitaceae, Cuscutaceae, Euphorbiaceae, Fabaceae, Lamiaceae, Lauraceae, Liliaceae, Linaceae, Malvaceae, Meliaceae, Mimosaceae, Moraceae, Musaceae, Myristicaceae, Myrtaceae, Papaveraceae, Papilionaceae, Poaceae, Rubiaceae, Rutaceae, Sapotaceae, Schisandraceae, Solanaceae, Sterculiaceae, Vitaceae, Zingiberaceae, the most frequently herbs utilizing for various Ethnoveterinary

treatment. In the Raigad district of Maharashtra, the locals and traditional healers utilized herbs to treat animal ailments such as fever, bone fractures, eye damage, skin conditions, milk problems, diarrhea, arthritis, Lumpy skin disease (LSD), Black Quarter (BQ), Dehydration, Nutritional Muscular Dystrophy (White Muscle Disease), Worms- intestinal Parasites, bovine pinkeye (Infectious Bovine Keratoconjunctivitis, Bird flu, Trichomonosis (Mouth canker), Psittacosis, Common Wounds, Infectious Bovine Rhinotracheitis (IBR),

Tendon Disorders, White muscle disease, Foot rot, Exo-parasites – Horse flies, Chicken pox, Downer cow syndrome, Rain rot, summer sores (habronemiasis), Maggote Wound and other ailments.

KEYWORDS: Raigad district, Maharashtra; livestock; ethno-medicine; ethnoveterinary.

INTRODUCTION

For many people, raising livestock is a major source of income, particularly in rural regions like India. Regardless of where they live, Indian men depend on this crucial source of income. These distinct perspectives on animal health and management affected the development of veterinary research and medicine. Human-animal relationships symbolize economic, cultural, social and religious cooperation. (Sohal and Tyagi, 1984). Farmers and livestock producers in distant places mostly rely on EVM as a workable substitute for contemporary veterinary practices because government veterinary care are only offered in large cities. Because plants include a wide range of photochemical, EVM studies are important. Eloff and McGaw (2008). The term “indigenous knowledge” refers to unique, historically created and well-known behaviors or information that is unique to one person or group and have evolved around the unique circumstances of a particular population or region (Grenier, 1998). Objectives for this EVMS research initiate from the documentation regarding traditional ethnoveterinary practices and remedies used by local communities in Raigad District. Identify and catalog plant species used in ethnoveterinary medicine in Raigad District. Analyze the efficacy and safety of traditional ethnoveterinary remedies used in Raigad District. Preserve and promote traditional knowledge and practices of ethnoveterinary medicine in Raigad District. Explore the potential for integrating traditional ethnoveterinary practices with modern veterinary medicine in Raigad District. About Scope for given research is the study will focus on Raigad District, with a specific emphasis on rural and tribal areas. The study will focus on common livestock species in Raigad District, such as cattle, buffalo, sheep and goats. The study will document traditional ethnoveterinary practices, including herbal remedies, spiritual practice and other forms of traditional medicine. The study will identify and catalog plant species used in ethnoveterinary medicine in Raigad District. The study will engage with local communities, veterinarians and other stakeholders to promote the preservation and integration of traditional ethnoveterinary practices.

MATERIALS AND METHODS

For documentation of traditional knowledge and practices related to ethnoveterinary medicine in Raigad Maharashtra research investigated the mandatory information regarding survey, kinds of livestock's, collection of plant, remedies preparation and utilization. This research is developed by using research methodology on the basis of study Area, Identification of plants, Survey, data analysis, Informants Selected for Sampling and Analysis of ethnoveterinary data in Quantitative manner.

Area of Study

The present study area Panvel and Uran Talukas of Raigad district, which lies between latitudes 18.51°N and 73.18°E. During the 2023-2025 season, the survey went ahead in a few of the chosen places. This research age has been beneficial to knowledge. A wealth of flora and ancient methods of rainfall prediction are two of the Konkani districts of Raigad's most well-known natural treasures. Raigad district is surrounded to the east by the Sahyadri hills, while Pune and Satara district are to the southeast. Uran, Mangaon, Alibag, Pen, Murud, Karjat, Khalapur, Panvel and Tala (Raigad).

Plant identification

Following established protocols, specimens were identified via local floras and the supporting data on ethnomedical uses found in various books, literature, Flora of Raigad District ((BSI flora), Flora of Maharashtra (Almeda, 2003), A handbook of field and Herbarium methods (Jain and Rao, 1977), The Flora of the presidency of Bombay (Cook, , 1908 and 1965) and Flora of Marathwada (Naik, 1998). Information regarding the many seasonal ethno-herbs that have been utilized confirmed difficult to find. The recorded specimens were preserved at the herbarium of the Department of Botany at B. N. Bandodkar College of Science, Raigad, Maharashtra, after being dried to serve as herbarium specimens for supporting documentation.

Survey

100 survey visits to 53 locations in the Raigad region are planned for 2024–2025. Traditionally medical professionals, village elders, experienced and elderly farmers informed rural residents, who provided the data. They were questioned in order to gather ethnoveterinary data. They had to respond in Marathi to the survey questions. Usually, the questions cover the types of diseases, the therapeutic approaches, the rate of recovery, the duration of all therapies, etc. As per disease symptoms, with the help of veterinary doctors,

illnesses are confirmed. The data have been compared to specific plant and plant material use standards. Data is collected through various questionnaires, interviews from livestock, farmers etc.

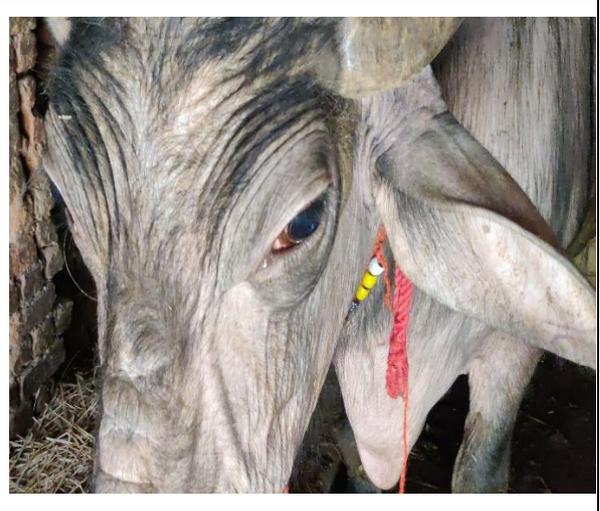
Caught Illnesses During Survey



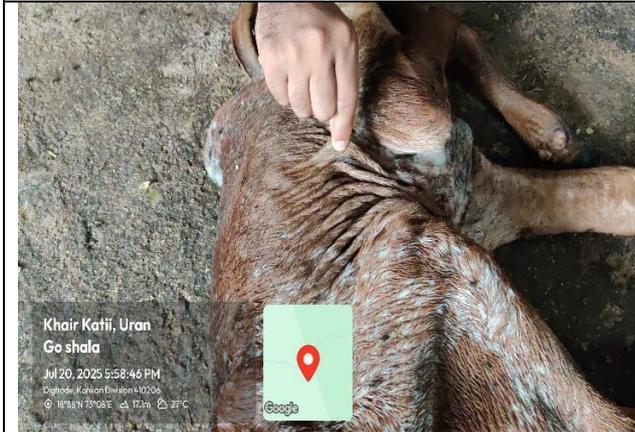
Lumpy skin disease (LSD)



Black Quarter



Bovine pinkeye (Keratoconjunctivitis)



Dehydration



Worms-intestinal Parasites



Bird flu



Chicken Pox



Maggote Wound



Tendon Disorders



Exo-parasites – Horse flies



Downer cow syndrome

RESULTS AND DISCUSSION

For many individuals, particularly in rural areas like India, livestock raising is a vital source of income. The unique perspectives on animal health have shaped veterinary research and practices, as human-animal relationships encompass economic, cultural, and social dimensions. Many livestock owners, especially in remote areas, rely on ethnoveterinary medicine

(EVM) due to limited economic source and access to governmental veterinary services in larger cities. EVM utilizes a variety of plant-based phytochemicals, making it significant for animal care. Indigenous knowledge, comprising historically developed practices unique to specific populations, is crucial in this context. The objectives of the EVM research in Raigad District include documenting traditional practices, cataloguing the plant species used, analysing the efficacy of remedies, preserving traditional knowledge, and exploring integration with modern veterinary methods. The focus will be on common livestock such as cattle, buffalo, sheep, goats and poultries in rural and tribal regions of Raigad. The study will encompass traditional methods, including herbal remedies and spiritual practices, and identified 73 ethnoveterinary plants, predominantly from families like Fabaceae and Euphorbiaceae. The ethnoveterinary remedies are prepared using various plant parts, specifically: 39 leaves, 22 seeds, 12 stems, 11 fruits, 7 roots, 7 rhizomes, and 1 instance each of a whole plant, pod, bark, and thorn. Various methods of herbal administration, including topical applications and oral feeds, are employed to treat ailments such as fever, wounds, and eye conditions. The collaboration between human and veterinary sciences highlights a mutual benefit, showcasing the importance of preserving and integrating traditional ethnoveterinary practices into contemporary healthcare.

Table 1: List of medicinal plants used in ethnoveterinary survey in Raigad District.

Sr. No	Botanical name	Plant part	Diseases/ Deficiency	Utilization and preparation of remedies
1.	<i>Abrus precatorius</i> L. Papilionaceae Gunja/Gunj	Seed	Retention of placenta	Paste of 5 seeds in lukewarm water is given orally for animal after delivery to easy removal of placenta.
2.	<i>Cynodon dactylon</i> Poaceae (Gramineae) Durva/Harali	Stem with leaves	gastrointestinal upset and acidity salivation	Stem with leaves fed to cattles, cat, dog to gastrointestinal upset diminishes.
3.	<i>Aegle marmelos</i> L. Rutaceae Bel	Leaves	Foot and mouth diseases	About 100-150 gm leaf paste mixed with honey is applied over mouth of cattle to cure mouth disease.
		Stem bark	Tympany	100 gm bark powder diluted in ½ litre water and this extract is given orally only twice a day to cure Tympany.
4.	<i>Annona squamosa</i> L. Annonaceae Sitaphal	Leaves	Wound	Paste of leaves in water is applied on wound.
		Leaves	Maggotted wound	Fresh or dry leaves are crushed with camphor is applied over maggotted wound. The seed-

				paste is also applied to treat Maggote wound.
		Leaves	Ectoparasite	Leaf extract of the plant is also reported to be very effective in case of external parasites.
5.	<i>ferula asafoetida</i> Apiaceae Hing	Root/ Rhizome Powder	Expectorant	5 gm Hing Powder dissolved in Lukewarm water and fed orally twice in day.
			Internal parasites	For 1 Cattles 25 gm Hing Powder dissolved in 2 litre normal water and fed orally in whole day. For chickens 10 gm Hing Powder dissolved in 1 litre normal water and fed orally twice in day. (For 10 chickens)
			Gut health	For Ducks/chickens/Turkey 10 gm Hing Powder, 5 gm Turmeric dissolved in 1 litre normal water and fed orally twice in day. (For 10 individuals)
			Phlegm	Paste of 20 g Hing powder, 5 g black pepper powder and honey 20 ml fed 5 ml of this mixture which remove cattle accumulated mucus.
6.	<i>Argemone Mexicana</i> Papaveraceae Swarnakshari/ Satyanashi	Root	Foot and mouth diseases	10 gm dried roots are cut into fine piece, immersed inside the bread is fed to cattle twice a day to cure mouth diseases.
			Seed	Tympany
7.	<i>Tridax procumbens</i> Asteraceae Akdandi	Stem and leaves	Rapid wound healing	10-12 leaves and 5 gm of turmeric powder fine mixed paste and add few drops of raw coconut oil, directly applied on wound or burned area.
8.	<i>Asparagus racemosus</i> Liliaceae Shatavri	Root	Black quarter	10 gm Fresh Root/ root powder is diluted in 1litre lukewarm water and given twice a day to cure black quarter.
			Increase lactation	1 kg wheat whole grain blend with 20 gm root powder feed twice in day. (feeding at morning half and evening half content)

			Dehydration to rehydration	Inhibit dehydration due to its diuretic effect
			Boost immunity and sex power in male cattles	10 gm per day for adult and 5 gm for juvenile bovine mix with daily regular chopped fodder. □
9.	<i>Acorus calamus</i> Acoraceae Vekhand /Yekhand	Rhizome	Gas and bloating	Fine paste diluted in water and massage on abdomens of cattle, digs, cats. To relives blotting
			Swollen muscles and sprains	Heavy weight lifting bulls and donkeys are suffered from Swollen muscles and sprains for such kind of issue the paste of vekhand is blended with alum stone and water which applied directly on affected part/Joints resulted cold relief.
10.	<i>Illicium verum</i> Schisandraceae Star Anise	Fruit	Diarrhoea	2 gm fruits paste blend with 5gm of jaggary, directly fed to cattle twice in day.
11.	<i>Pennisetum purpureum</i> Poaceae Hathi ghas/ Charbat Gavat	Stem With leaves	Protein and fibre deficiency	3-4 kg per day directly feed. Can used as regular fodder. .
12.	<i>Momordica dioica</i> Cucurbitaceae Kantola/ Kartoli	Seed	Deworming (Internal parasites)	Prepared Paste of 6-7 seeds and fed at evening time to kill worms
			Gastroprotective	20 gm of Dried seed powder of Kantola blend with 100 gm jaggary feed to large cattle to avoid Gastrointestinal diseases.
13.	<i>Bixa Orellana</i> Bixaceae Shendur	Fruit	Bone fracture	Paste of seed directly apply to seal or damaged part of body to cure bone fractured
14.	<i>Azadirachta indica</i> Meliaceae Kadulimb	Leaves	Feet and mouth diseases	Half litre Decoction prepared from leaves mixed with 2 camphor dies used to wash infected area of cattle to maintain foot and mouth diseases.
			Blood Dysentery	60 ml decoction of leaves is given 3 thrice in day to cure blood dysentery.
			Intestinal worm	20 ml Leaf juice is mixed in water is given orally for expelling intestinal worms.
			Wound healing	Leaves decoction is used to wash wound then dried leaf powder spread externally for

				quick healing of wound.
			Fever	100 gm leaf extract is given internally to cure fever.
			Exo-parasites	Incubating nests of chicken/ Ducks filled with sundried leaves for Control or inhibit growth of mites.
15.	<i>Vitex negundo</i> Lamiaceae Vanai/Nirgundi	Leaves	Pyrexia (Normal Fever)	Feeding 7-8 leaves once in morning and if not cured at evening again fed 5 leaves and 1 lit water with 250 gm jaggery compulsory.
16.	<i>Bombax ceiba</i> Bombacaceae Kate-saver	Thorn powder	Bone fracture	50 gm thorn powder blend with 30gm wet limestone apply on fracture region and tie with cotton ribbon for 1 day. (Apply daily up to final recovery.)
		Stem	Intestinal worms	Juice extracted from neat 100 gm bark in cupful of water is given orally once in day
17.	<i>Ocimum basilicum</i> Lamiaceae Sabja	Seeds	Heat stroke	50 gm Tup and 50 gm Sabja seeds add 200 ml muster oil fed thrice in day to maintain summer heat.
18.	<i>Brassica napus</i> Brassicaceae Choti rai	Seed	Mastitis	100 gm seed powder mixed with 250 gm jaggery and the paste is applied over cracked nipples to treat mastitis.
19.	<i>Bambusa vulgaris</i> Poaceae Bambu	Leaves	Retention of placenta	Feed juvenile leaves of bamboo for Retention of placenta in goat and sheep.
20.	<i>Caesalpinia bonduc</i> Caesalpinaceae Lata-karanj / Sagargota	Seed	Intestinal worms	Fed decoction of seed powder orally to wannish worms present in the gut.
		Leaves	Wound	Dry leaf paste is applied on wound till healing.
21.	<i>Calotropis gigantea</i> Asclepidaceae Ruhi	Latex	Thorn poisoning in muscle or removing	For removing thorn or wound healing 2-3 drops of latex directly insert in wound. (Painless treatment)
			Wound healing	A mixture of latex and shendur in same quantity applied on wound.
22.	<i>Myristica fragrans</i> Myristicaceae Jaiphal	Seed and seed coat	Accidental relaxing	After accidental damage for relaxing to cattle feed 0.5 gm of seed paste mixed in 500 ml of water.
			Killing tick	Seed coat (Javetri) powder uniformly sprinkled on cattle's

				body to killed ticks.
23.	<i>Annona reticulata</i> Annonaceae. Ramphal	Leaves	Summer Inflammation	Applied blended paste of 8-10 leaves and 5 dies of camphor on buffalo skin to reduce summer skin inflammation.
24.	<i>Calotropis procera</i> Asclepidaceae Ruhee	Leaves	Tympany	2 ½ leaves given orally to cure Tympany.
		Latex	Pus remove or reduces	For reducing pus from wound, 8-10 drop of latex is directly applied on wound.
			Swelling	A strip of rag adhered with sticky latex and red lead (shendur) is coated around swollen area till cure.
25.	<i>Capparis zeylanica</i> Capparaceae Waghota	Leaves	Bone fracture	Paste prepared from 100-150 gm leaves, 10 gm ant heap soil, mixed in water and coated around fractured area and bandaged with support of bamboo strips.
		Leaves	Diarrhoea and Dysentery	2-3 Leaves are given as feed stuff for 2-3 days in diarrhoea.
26.	<i>Capsicum annuum L.</i> Solanaceae Mirachi	Fruit	Mouth diseases	Fruit paste is given orally in mouth diseases.
			Snake bite	Fruit is feed to the cattle in case of snake bite.
27.	<i>Cassia auriculata L.</i> Caesalpiniaceae Tarod	Leaves	Diarrhoea & Blood Dysentery	250 ml leaf juice is given to cattle twice a day to cure blood dysentery. 100 gm tender shoot tip crushed with 50 gm butter and jaggery given to cure Diarrhoea.
28.	<i>Cassia fistula L.</i> Caesalpiniaceae Bahava	Stem	Diarrhoea and Dysentery	50 gm stem paste and salt boiled in 1 litre water, prepared decoction is given twice a day orally in case of diarrhoea.
		Stem bark	Snakebite	The bark juice mixed with water is given orally to treat snakebite.
		Fruit	Swelling	Heated fruit applied on affected area to get relief from swelling.
29.	<i>Cassia obtusifolia L.</i> Caesalpiniaceae Takala	Leaves	Diarrhoea and Dysentery	100 ml decoction of leaves mixed with common salt is given orally to cure dysentery.
		Seeds	Deworming (Internal parasites)	2-3 seeds fed thrice in week to lower cattles (Goat, sheep) and 5-6 seeds fed to higher cattles. (All bovine) twice in week.
30.	<i>Cissus quadrangularis</i>	Stem	Bone fracture	Stem crushed in water and paste applied on fracture area and tied

	Vitaceae Hadmodi			with stick of bamboo.
31.	<i>Citrullus colocynthis</i> (L.) Cucurbitaceae Kadu chiret	Seed	Tympany (Frothy bloating)	20 gm seeds powder crushed with water is given to the animal twice in a day in case of Tympany.
		Seed	Retention of placenta	Equal weight of seeds and jaggery mixed with 250 gm ginger is given to the animal to easy expulsion of placenta.
32.	<i>Cocos nucifera</i> Areaceae Naral	Shell's oil	Fungal infection in feet	Fresh coconut shells boiled in 500 ml water which remain 50 ml only, this extracted oil utilized as lubricant in feet's and underarms of Goat, cattle to avoided fungal infection in rainy season etc.
		Tender Coconut water	Mouth rehydration And summer stroke	1 Tender Coconut water given to cattles, chickens, ducks to avoided summer stroke as well as rehydration of mouth, if cattles are suffering from serious disease.
33.	<i>Citrus aurantifolia</i> Rutaceae Limb	Fruit	Mastitis	Warm fruit juice mixed with indigo is applied to udder to cure the swelling of teats (nipple).
			Eye diseases	The filtered fruit juice is used to pour in eyes twice a day to treat eye diseases.
				Mixture of fruit juice and alum is dropped to the eyes to treat general eye problem.
Mouth rehydration And summer stroke	Half lime juice mixed in 1 lit water and mixed sugarcane juice or 20 gm of sugar and given to cattles, chickens, ducks to avoided summer stroke as well as rehydration of mouth, if cattles are suffering from serious disease.			
34.	<i>Sorghum bicolor</i> Poaceae Jwari	Seeds	Bone fracture and increase bone density	Regular feeding of <i>Sorghum bicolor</i> which cures bone fracture as well as increase bone density in pigs.
35.	<i>Colocasia esculenta</i> (L.) Areaceae Alu	Leaves	Sterility	Leaves blended in regular fodder to cattle in case of infertility.
36.	<i>Tamarindus indica</i> L. Caesalpiniaceae Chinch	Leaves	Bone fracture	Fresh leaf paste, 20gm limestone and equal amount of ant heap soil mixed with warm

				water is applied on bone fracture area to cure fracture.
			Maggote wound	Paste prepared from 20 gm Chinch (<i>Tamarindus indica</i>) leaves and 20 gm Takala (<i>Cassia obtusifolia</i>) leaves, extracted juice from this paste and dropwise inserted in wounds of all kinds of cattle and pet animals which resulted Maggote wound Fastly healed.
		Seed	Abscesses	Pilled seeds powder blend with in one pinch of lime stone powder and few drops of water, directly applied on Abscesses wound which resulted pus is reduced.
37.	<i>Coriandrum sativum</i> L. Apiaceae Dhania	Whole plant	Foot and mouth diseases	Whole plant is fed along with fodder. to treat foot and mouth diseases.
		Seed	Diarrhoea and Dysentery	250 gm dried seed powder mixed with water is given orally twice in day for three days to cure diarrhoea.
		Seed	Proper digestion in weakness	50 gm crush in curd and feed twice in day
38.	<i>Cuminum cyminum</i> Umbelliferae Jire	Seed	Fever	100 gm seed powder boiled with water and prepared decoction is given twice a day to cure fever.
			Blotting	25 gm roasted <i>Cuminum cyminum</i> seeds soaked overnight and make paste to cure blotting in lower cattles like goat, sheep etc.
39.	<i>Curcuma amada</i> Roxb. Zingiberaceae Aambehaladi	Rhizome	Bone fracture	Paste of rhizome is applied topically on fracture bone and bandaged with cotton cloth.
		Rhizome	Tympany	One teaspoon rhizome powder, 100 gm of jaggery, 2 gm alum mixed with water is given to cure Tympany.
		Rhizome	Foot and mouth diseases	50 gm rhizome powder mixed with 100 ml cooking oil and 100 gm jaggery is applied on infected area of mouth 2-3 times in day to cure mouth diseases.
40.	<i>Curcuma longa</i> L. Zingiberaceae Haladi	Rhizome	Foot and mouth diseases	100 gm rhizome powder mixed with 100 gm butter is applied on tongue to cure mouth diseases.
		Rhizome	Wound	For deep wound ointment,

				prepared from rhizome powder mixed in cooking oil is applied on Wound.
41.	<i>Cuscuta chinensis</i> Lamk. Cuscutaceae Amarvel	Stem Climber	Wound Healing	Paste of 20 gm climber directly applied on wound which seal and dry the wound.
			Lumpy Skin Disease (LSD)	A paste of 10 g of curd and 10 g of dodder stem directly applied to the affected skin area. Used the remedy regularly 5-6 times till relief and dryness occurred.
			Galactagogue	Animals are fed with stem to increase the milk production.
42.	<i>Camphora officinarum</i> Lauraceae Kapur	Leaves	Lumpy Skin Disease (LSD)	Same amount of blended paste of Camphor leaves and Haldi directly applied on marks of lumpy disease 4 time per day till relives.
43.	<i>Dalbergia sissoo</i> Papilionaceae Shisav/ Shisam	Leaves	Diarrhoea	Leaves ground with butter milk and given twice a day to cure blood diarrhoea.
44.	<i>Datura inoxia</i> Mill. Solanaceae Dhotra	Leaves	Swelling	Heat leaf and make it smooth and tie-on swollen area of cattle's
45.	<i>Lepidium sativum</i> Brassicaceae Halim	Seeds	Retention of placenta	Halim seeds 10 g, Muster oil 10 g, small Muster 10g and black ajwain 10 feds to
			Labour pain reduction	After delivery cattles were relaxed from Labour pain by feeding of 20 gm of boiled seeds.
46.	<i>Eucalyptus globulus</i> Labill. Myrtaceae Nilgiri	Leaves	Twisted leg	Warm leaves are tied on twisted leg.
		Oil	Maggot wound healing	Few drops of Oil applied on wound to stop growth and kill the worms.
47.	<i>Zea mays</i> Poaceae Maka/ Corn	Leaves with stem or juvenile corn	Galactopoiesis	Fed daily for milk secretion increment and free from nutrient deficiency.
48.	<i>Euphorbia prostrata</i> Ait. Euphorbiaceae Gondya	Latex	Thorn stuck removing or relive from irritation	Apply few latex drops on thorn stuck.
		Leaves	Healing Wound	Applied fine leaves paste on wound.
49.	<i>Ficus racemosa</i> L. Moraceae Umbar	Ripen Fruit	The placenta's continuation	Feed 10-15 fruits instant delivery to removal of placenta.
		Watery Latex	Immunity boosting	Feed 50 ml per day after/Before recovery of any disease.

50.	<i>Ficus religiosa</i> L. Moraceae Pimpal	Gum/ Latex	Snake bite	Gum/latex of the plant is applied on snake bite area.
			Spine itching and irritation	To remove spines from muscles, apply latex
51.	<i>Gardenia resinifera</i> Roth. Rubiaceae Ananta chafa	White latex	Foot and oral disorders	10-15 drop of latex mix well in groundnut oil and apply on wounds
52.	<i>Gloriosa superba</i> L. Liliaceae Kalalavi/Agnishikha	Root	Wound	Freshly prepared root paste is applied on wound.
		Root	Increase milk Lactation	2 gm shade dried root powder is fed to cattle for seven days after delivery to improve lactation quality.
53.	<i>Gossypium hirsutum</i> L. Malvaceae Kapus	Seed cake	Increases milk lactation	Feed 100 gm seed cake once in day
54.	<i>Helicteres isora</i> L. Sterculiaceae Muradsheng	Root	Diarrhoea and Dysentery	50 gm roots soaked overnight in water and extract is given orally 2 times a day to cure dysentery.
55.	<i>Arachis hypogaea</i> Fabaceae Bhui-mug	Seeds	Increase Milk thickness	Feed 250 gm seed cake once in day
56.	<i>Hibiscus cannabinus</i> L. Malvaceae Ambadi	Leaves	Common Tumour	Make leaves paste add ghee daily to remove tumour.
		Leaves	Remove placenta	Dry leaves paste blend with jaggery feed orally or can feed mixed in any regular fodder. .
57.	<i>Holarrhena pubescens</i> Apocynaceae Kuda/Indravaja	Bark	Diarrhoea and Dysentery	100 gm bark paste soaked overnight in water; the extract is given orally to cattle twice in day till cure diarrhoea.
		Pods	Intestinal worms killing	3 dry pods mix in regular fodder. twice in 7 day.
58.	<i>Ipomoea aquatica</i> Convovulaceae NaliVel	Leaves and flower	Activation of milk lactation after birth	20-25 fresh leaf and flower blend in fodder. daily regular basis for 10 days.
		Leaves	Inflammation muscle swelling	Juvenile leaves are heated on fire and paste is applied on inflamed region to reduce and muscle swelling.
60.	<i>Ipomoea fistulosa</i> Mart. Convovulaceae Besharami	Leaves	Reduce Swelling	Heat 2-3 leaf on pan and tie on swollen part of body 1 hr minimum.
61.	<i>Jatropha curcas</i> L. Euphorbiaceae Japhali	Leaves	Wound	It is used as an ointment for cuts after the foliage are ground up on a stone with a small bit of water to create a paste.

		Latex	Juvenile Teeth pain and gum bleeding	Latex directly applied on teeth, massage on gums for instant relief of teeth pain.
		Leaves	Intestinal worms	100-150 ml leaf juice is given orally for twice in day for in case of intestinal worms. (as per size of cattle).
62.	<i>Leucaena latisiliqua</i> (L.) Mimosaceae Su- babbhul	Leaves	Diarrhoea and Dysentery	15-20 leaves heated and soaked overnight in mild worm water and at morning time fed cattles to cure Diarrhoea and Dysentery.
			Milk lactation	Regular feeding for excess milk lactation. Specially in Goats
		Green Pods	Stomach ache And Dysentery	Feed 2-3 green pod to reduce Stomach ache and relive from Dysentery
63.	<i>Linum usitatissimum</i> L. Linaceae Jawas	Seed	Diarrhoea	80 gm seeds powder mixed with regular fodder. to inhibit effect of Diarrhoea.
		seeds	Bone fracture	30 gm seeds blend and feed for fast recovery of bone fracture.
64.	<i>Madhuca indica</i> Sapotaceae Moh	Ripen Fruit	Fever	Ripen Fruit blend with jaggery and given to all kinds of cattle to reduce temperature.
		Flower juice	Skin irritation/ Disease	Juice of flower directly applied on skin which gives instant relive from irritation.
65.	<i>Mucuna pruriens</i> Fabaceae Khaajkuyali.	Seed	Infertility/ Increase Sperm Count in male castles	Half pilled seeds soak in water overnight and feed at morning.
66.	<i>Tephrosia purpurea</i> L. Fabaceae Sharapunkha/ Govardhani	Leaves	Pox fever	Feed foliage directly to cattle to reduce body temperature.
		Flower/ Pod	Chicken pox	Feed Flower/ Pod to chicken/cattles/ directly to reduce marks of pox.
67.	<i>Mentha spicata</i> L. Lamiaceae Pudina	Leaves	Fever	50 gm paste blend with 50 gm jaggery dissolve in 2 liter water, feed them as per their thirst.
			Heat stroke	Paste of 20gm fresh leaf, 50gm jaggery and 5 gm salt mixed in 2 Liter water feed them orally
68.	<i>Mimosa pudica</i> L. Mimosaceae Lajalu	Leaves	Maggot Killing and healing wound	10 gm fresh/dried leaves powder mixed in tobacco and applied on wounds and tie with cotton ribbon tightly.
			Uterine prolapse	10 gm fresh/dried leaves powder and add 10 gm casting soda

				mixed in water and feed orally as per cattle needed.
69.	<i>Momordica Charantia</i> L. Cucurbitaceae Karale	Leaves	Relive Common or Blood Dysentery	Using 10-15 leaf for decoction (200 ml boiled till remain only 50 ml- one third) is given to cattle in morning and evening cure dysentery.
70.	<i>Smithia setulosa</i> Fabaceae Kevaka/Kavala	Leaves	Foot disease	Paste of leaf apply directly between toe and wounds
71.	<i>Bergerakoenigii</i> L Rutaceae Kadhi-Patta	Leaves	Food poisoning	50 gm leaves dry leaf powder blend in milk and given orally twice in day to avoid poisoning effect in stomach.
72.	<i>Musa paradisiaca</i> L. Musaceae Kela	Fruit	Regulate milk lactation cycle	Peeled Fruit fed with fodder. to regulate and maintained lactation cycle.
73.	<i>Eleusine coracana</i> L. Poaceae Nachani	Seeds	Bone fracture	Prepared Nachani Bhakari fed to recovery of bone fracture due to high calcium content.
74.	<i>Nicotiana tabacum</i> L. Solanaceae Tambaku	Leaves	Wound healing in cold season	Turmeric and Dried tobacco leaf powder blend in 5 dies of camphor and directly applied on wound and scratches.
			flea and Tick killer	10 gm Tobacco leaf powder directly apply on skin or in case of hairy skin used 2 pinch Tobacco leaf powder mixed in vinegar and spray 3-4 time daily.
			Smoking for mosquito and flies free cowsheds	Dry leaf burnt and create smoke for inhibition of mosquitos and flies.
			Bed-bugs irritation	Roasted tobacco leaf powder (Mishri/Dantkanti) sprinkled on cattle's body.
			Scratches and cuts healing	Apply leaf grain dry leaf crush with lime (white wash) on scratches and cuts to stop Haemorrhage.
			Maggots killing	Dry leaf powder crushed, add 5-6 custard apple leaf and directly applied on Maggots wound

CONCLUSION

The study in Raigad district revealed that traditional healers and locals in the area use various herbs to treat various diseases, highlighting their extensive knowledge of animal diseases and herbal therapies. Table 1 represents ethnoveterinary medicinal plants identified through field

research, including 73 species from 41 families and 65 genera, botanical names, regional names, useful components, and traditional veterinary treatments. Utilization of nearby resources by local livestock owners and healers, developed a sustainable approach for veterinary treatment. As per the survey, 73 herbs are used to cure over 132 illnesses of different livestock in the Raigad region of the Uran and Panvel blocks' villages. In summary the Digestive & Internal Issues, Wounds & Physical Injuries, Reproductive & Lactation Issues, External Parasites & Skin Irritation, Environmental & Nutritional Issues, Miscellaneous Conditions, Infectious & Systemic Diseases types of Diseases are found which cured by ethnoveterinary way.

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REFERENCES

1. Almeida M. R. Flora of Maharashtra—Vol. 4a. Blatter Herbarium, St. Xavier's College, Mumbai, (2003); 196.
2. Anushree Chaudhari, Jamdhade VM, Rohan Jitekar, Raju Rathod and Shalini Pandey. (2024)- Ethnoveterinary practices by local people of Raigad district Maharashtra, International Journal of Science and Research Archive, 2024; 12(01): 2281–2286,
3. Cook R. World cattle inventory: Ranking of countries. May 12. Retrieved from: <https://beef2live.com/story-world-cattle-inventory-ranking-countries-0-106905>, (2020).
4. Cooke T. The Flora of the presidency of Bombay., Vol. I, p. II, III. Botanical survey of India. Calcutta (1967) and (1908), EDN.

5. Cooke T. The flora of the presidency of Bombay., Vol. I, II, III. Botanical survey of India. Calcutta, (1965).
6. Grenier L. Working with Indigenous Knowledge A guide for Researchers, IDRC, Ottawa, (1998).
7. Jain SK and Srivastava Sumita, S. The dictionary of ethnoveterinary plants of India. Deep publications New Delhi, (1999).
8. Jain SK and Rao RR “A handbook of field and Herbarium methods.” Today and Tomorrow. [Research review]. New Delhi: Printer Publisher, (1977).
9. Jain SK. and Srivastava Sumita S, The dictionary of ethnoveterinary plants of India. New Delhi: Deep Publications, (1999).
10. Kiruba SS, Jeeva S. and Dhas SSM Enumeration of Ethnoveterinary plants of Cape Comorin, Tamil Nadu, Indian Jour. Trad. Knowl., (2006); 5(4): 576–578.
11. Lans C, Khan TE, Curran MM and McCorkle M. Ethnoveterinary medicine: Potential solutions for large-scale problems. In S. G. Wynn and Fougère B. J. (Eds.), Veterinary Herbal Medicine, Elsevier Health Science, (2007); (17–32).
12. Mulay JR, Dinesh V and Sharma PP. Study of some ethnoveterinary medicinal plants of Ahmednagar district of Maharashtra, India, Jour. of Sci. and Techno, (2012); 2(6): 15–18.
13. McGaw LJ, & Eloff JN. Ethnoveterinary use of southern African plants and scientific evaluation of their medicinal properties. Journal of Ethnopharmacology, (2008); 119(3): 559–574.
14. Naik VN. Flora of Marathwada—Vols. 1 & 2. Amrut Prakashan, Aurangabad, (1998); 1182.
15. Phaahla CS, Shai, JL., Maduna, V., Moropeng, R. C., & Magano, SR. Documentation of ethnoveterinary knowledge and alternative practices for cattle tick control in Sekhukhune District, Limpopo Province, South Africa. Frontiers in veterinary science, (2025); Vol- 11, 1488960.
16. Seeland K, National Park policy and wildlife problems in Nepal and Bhutan. Population and Environ. <https://doi.org/10.1023/A:1006629531450>, 2000; 22(1): 43.